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ABSTRACT

These three conference papers from the Biennial Conference on Postsecondary Education for Persons who are Deaf or Hard of Hearing focus on career planning and placement strategies for students with deafness or hard of hearing. The first paper, "Successful Job Development and Placement Strategies with Deaf and Hard of Hearing College Students" (Sara L. Geballe), describes the employment services for students with deafness or who are hard of hearing at Seattle Central Community College. Barriers to successful employment of these students are identified. The second paper, "Career Success of Deaf and Hard of Hearing Graduates: Preliminary Findings of a Ten-Year Study" (John G. Schroedel and others), discusses the results of a study of 325 individuals with deafness or hard of hearing that examined career attainment ten years after postsecondary graduation. The study found that the majority were economically self-sufficient and worked in professional, technical or managerial jobs. The final paper, "Deaf Supervisors of Hearing Employees: A Profile in Progress" (Janet MacLeod-Gallinger and Susan Foster), reports findings from a survey of 121 postsecondary graduates with deafness or hard of hearing that sought to identify supervisors of primarily hearing employees. Results found 43 of the graduates were currently supervisors. (Some papers contain references.) (CR)

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Developing Career Planning and Placement Strategies

Conference Proceedings
1996

Challenge of Change: Beyond the Horizon

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Successful Job Development and Placement Strategies with Deaf and Hard of Hearing College Students

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For work to be authentically human, it must be about a search, too, for daily meaning as well as daily bread, for recognition as well as cash, for astonishment rather than torpor; in short, for a sort of life rather than a Monday through Friday sort of dying.
— Studs Terkel

INTRODUCTION

Since June 1992 I have served as the Employment Services Coordinator for the Regional Education Center for Deaf Students (RECDS) at Seattle Central Community College (SCCC) in Seattle, WA. Through a variety of creative job development and placement strategies, "job ready" deaf and hard of hearing students at SCCC are successfully finding and retaining gainful employment in their chosen fields upon graduation. I would like to share with you some of our success stories, along with some of the serious barriers and challenges we still face in assisting deaf students and recent graduates in their job search efforts in the Puget Sound area.

This paper will focus on our employment services for deaf and hard of hearing students at SCCC, including specific examples of the types of major challenges we still face. Still to be addressed are ways to overcome these barriers and challenges, particularly in the context of the dramatically changing American workplace, and how these profound and widespread changes especially impact deaf students. The U.S. workplace is becoming ever more demanding of the types of skills deaf students have traditionally been weak in -- written English, critical thinking skills, and problem-solving skills. As a result of rampant corporate "downsizings," the growing demand for temporary rather than permanent workers, and the generalized loss of long term job security as we once knew it, there is an ever greater need for all individuals to take full responsibility for managing their own career paths. The question is, are our students ready for "Workforce 2000?"

First, I'd like to give you a little overview on why the Employment Services Coordinator position was created at Seattle Central. What documented needs were we responding to? Second, I will describe the range of direct employment services RECDS provides to our students/recent graduates. Third, I will describe the analogous types of direct services we provide to Puget Sound area employers in terms of educating them about deafness and introducing them to our "job ready" students. When qualified, job ready graduates meet deaf-educated employers, some exciting success stories happen!

I will also discuss briefly how on a case-by-case basis we sometimes coordinate RECDS's employment services with Vocational Rehabilitation (VR) and/or other agencies with whom our students may be affiliated.

These interagency partnerships allow for a maximizing of employment services to students--with the different members of the "employment services team" offering different valuable pieces to the overall employment plan. Similarly, I will touch on how we coordinate coordination RECDS's employment services in the context of a mainstream community college setting. In other words, how do our students have access to and take advantage of campus wide employment-related services--such as the SCCC's Cooperative Education & Career Placement Office, or the college-wide Career Fair? Finally, I want to discuss a variety of barriers to successful employment we have observed. Some of these limitations are on the part of students -- such as a lack of "job readiness," or weak English skills. Others, are barriers on the employer side -- such as attitudinal barriers and fears about hiring deaf workers, or culturally biased testing procedures. While yet another class of barriers has recently emerged because of how incredibly quickly our world and society is changing. In an "Information Age" with a global economy we *all* need to be computer literate and we *all* need to be English literate. Employment opportunities in the traditional hands-on trades are quickly disappearing. Generally speaking, these trades are either becoming highly automated and new skills and technologies need to be learned to perform them competitively, or they are being shipped abroad to other countries where labor is much cheaper. With all these points in mind, how can we best prepare deaf college students to be gainfully employed in today and tomorrow's workplace?

Why Employment Services Are Needed

RECDS was established in 1969 as one of four federally funded post-secondary regional education programs for deaf students. Over the last 27 years, we have provided a wide range of direct support services to students, including: classroom interpreting, notetaking, tutoring, academic and personal counseling, and an extensive college transition ("prep") program. Nevertheless, it was typically seen that students would graduate or leave SCCC and generally be unemployed or seriously underemployed. And if they were employed, it was often was in a position unrelated to their majors. In other words, deaf students were coming to college, selecting majors, successfully graduating, but then not finding work in their chosen fields, or not finding work at all. Some were continuing to rely on SSI and SSDI for subsistence living, and were not becoming productive members of society. In some cases, VR had supported students through several years of vocational training with a clear employment goal in mind which never came to fruition.

While we at SCCC did not keep formal statistics on this phenomenon, it was an obvious and recognized problem. And our situation at SCCC was far from atypical. Nationally, it has been well documented that people with disabilities are by far the most unemployed and underemployed of any minority group. Across the country, students with disabilities are entering colleges in record numbers, but they are not yet entering the workforce in correspondingly high record numbers. In 1950, it is estimated there were only about 250 deaf college students nationwide, whereas in 1990 there were an estimated 10,000! While higher

education opportunities for students with disabilities have greatly increased in recent years, employment opportunities for such graduates have not kept pace.

Accordingly, the RECDS Employment Services Coordinator position was created in 1992 to address this unemployment and underemployment problem vis-á-vis the deaf and hard of hearing student population at Seattle Central. Over the past 4 years, we have on the one hand developed a suite of employment services for students -- to assist them in developing the job search skills and savvy they need to market themselves effectively to prospective employers. And on the other hand, we have developed a suite of direct services to area employers -- to introduce them to our pool of qualified job seekers and to educate them about deafness. As of December, 1995, more than 50 REDCS students/graduates had been employed or placed in Cooperative Education internships in more than 40 Puget Sound area companies. For some of these students it was their first work experience ever. For some of these companies it was their first experience hiring a deaf employee.

Types of Employment Services Available to Students

RECDS offers a wide range of employment services to current, mainstreamed students and recent graduates. We are a district-wide Center and thus serve deaf students on three different Seattle Community College campuses -- North, South, and Central. Together, the three campuses offer an array of more than 100 fields of study.

Training in Lifelong Learning Skills:

- Self-assessment of one's transferable skills, accomplishments, personal assets
- Professional resume development and resume updating
- How to effectively fill out job applications
- How to write successful employment letters
- Interview skills training
- Presenting oneself professionally
- Training on how to research companies/how to network
- Negotiating the job offer
- Special issues for deaf job seekers -- how to use an interpreter appropriately, understanding your rights under the ADA, how to talk about communication issues during the interview, etc.

Individual employment tutoring is available for students needing extra help with any of the above.

Individualized Job Development and Placement:

- Job development -- for part-time or full-time work
- Cooperative Education worksite placement

- Community Service worksite placement
- Introductions to specific employers
- Setting-up job interviews
- Post-placement follow-up at work/internship sites

Group Job Search Services:

- *Job Preparation Course* (2-credits)
- Scheduled series of campus recruiter visits/informational interview sessions for "job ready" students
- *Job Search Support Group*
- *Climbing the Career Ladder* support group -- offered evenings for working deaf adults
- Special workshops on employment issues, such as "What are Employers Looking for and Why?" "Sexual Harassment in the Workplace," "The Transition from College to Work," and "The Role of VR in the Employment Process."

Additional Services:

- Maintaining a current job listings bulletin board
- Maintaining informational files on numerous Puget Sound businesses for student use in researching their job search
- Educating students on how to take advantage of other employment resources on campus (i.e., College Work Study, Computerized Career Library, Career Fair, etc.)

To receive any of the above employment services, students must sign a formal "Employment Services Contract" with the Employment Services Coordinator. The contract lists the policies they must agree to in order to receive services -- such as arriving on time to appointments, informing the Employment Services Coordinator at least 24 hours in advance if they need to cancel a job interview, etc. Students understand that if they violate the contract, they will have further employment services suspended. The only way services can be restored is if the student requests a meeting with the Director and me to appeal the suspension. Each case is handled individually.

Job Preparation Course

We strongly recommend this 2-credit course for all student nearing graduation, especially those who will be seeking immediate employment, and not transferring to 4-year programs. Taught in ASL, this course covers all the standard aspects of job search, such as resume development and interviewing skills. But, in addition, it covers a number of topics of special interest and importance to deaf job seekers: how to appropriately use an interpreter in a job interview; understanding one's rights in the job application and hiring

process under the ADA; how to successfully counter prospective employers' fears about on the job communication, telephone usage, etc. This course is especially exciting because students learn to effectively critique each other and provide valuable feedback to each other. Peer feedback is sometimes more effective and carries more punch than instructor feedback. Some of the more difficult, but essential, concepts to get across to our students include: a) identifying their personal success stories and accomplishments; b) grasping that they need to look at the job interview from the employer's perspective, *not* their own (i.e., how they will meet the company's needs, not how the company will benefit them); and c) recognizing the special transferable skills and personal assets they have developed in various aspects of their lives, and figuring out how these same qualities can be of great value to employers.

Last year, each student participated in a total of four mock interviews -- all of which were videotaped. By receiving copies of their four sequential mock interviews (with the immediate feedback also videotaped), students could track their progress. It is hoped that by keeping their videotapes, students will find them to be a useful refresher tool in years to come when they have long since left SCCC and find themselves interviewing for future positions. Another highlight of this course has been inviting successful deaf professionals to visit the class -- either to assist with mock interviews, or to make presentations on important issues such as: work ethics, getting off of SSI, or how to have the "American dream." "Dress for Success on a Student Budget" has been another favorite, presented by professional buyers for Nordstrom's Rack in the Seattle area.

Several video clips from last year's job preparation course were shown as part of the presentation. These brief segments were intended to give the audience a sense of the value of mock interviews and also how helpful it is to have inspirational deaf professionals come speak to the class.

Recruiter Visits

A very effective follow-up to the job preparation course, has been scheduling a series of on-campus recruiter visits at our Center. These visits serve several key functions simultaneously. They: a) provide students with additional "real world" interview practice; b) expose students to human resource representatives from a variety of public and private organizations, thereby giving students an appreciation for the different types of employers, work environments, and corporate cultures that exist; c) educate recruiters in an extremely positive and eye-opening way about a previously untapped pool of highly qualified and polished job candidates; and finally, d) do indeed lead to actual job placements. By touring our Center, meeting with our Director, learning how to conduct interviews using interpreters, and meeting our "job ready" students, many recruiters find the experience makes a profound impression on them. Often they remember our students by name, and keep them in mind for future job openings as appropriate positions arise.

Cooperative Education Placements

Our highest job placement priority is to work with graduating students and recent graduates (up to one year post-graduation) and to assist them in finding gainful employment related to their fields of study. However, job preparation for competitive employment at RECDS begins long before graduation. One of these early job preparation steps is to take a Cooperative Education (Co-op Ed.) work experience. Students who have declared majors are strongly encouraged (and for some majors they are actually required) to undertake at least one Co-op Ed. work experience. We find these internships are enormously helpful in making students more employable upon graduation.

Co-op Ed. internships serve several very important functions. They: a) allow students to see if they actually like the type of work their course of study is preparing them for (better to find out now, and make a mid-course change, then wait until after graduation); b) provide students with "real world" experience that simply cannot be duplicated in the classroom; c) furnish students with concrete work experience in their field to put on their resume *before* graduation; d) generally provide a source of professional references and letters of recommendation that will greatly assist students when seeking employment post-graduation; and e) sometimes lead to a permanent position at the internship site.

While some Co-op Ed. internships are paid, most are unpaid. All students earn college credit in their majors. Students must develop a series of measurable "learning objectives" for their internship which they will be evaluated on at the end of the quarter. At SCCC, Co-op Ed. is generally done on a part-time (i.e., 10-25 hours/week) basis during the academic year while students are also taking courses. Additionally, students can sign up for more full-time Co-op Ed. placements during the summer quarter -- which can be in the Seattle area, or elsewhere. We emphasize to students that from the employer's perspective a "work experience is a work experience," and they don't care if you were paid for it or not.

Community Service

For students who have not yet declared majors, and do not have strong work histories prior to coming to SCCC, community service is an effective way to gain work skills, add to one's resume and, at the same time, gain a better sense of what they field might like to pursue. Students may earn 2-credit hours (pass/fail) by performing community service in any non-profit or public organization. While these unpaid work experiences are less structured than Co-op Ed. (i.e., no formal "learning objectives"), they still offer students an excellent way to: a) add valuable work experience to their resumes; b) gain a better sense of what type of work they are drawn to and are suited for; and c) develop professional references and letters of recommendation.

TYPES OF SERVICES AVAILABLE TO EMPLOYERS

The good news is that since the passage of the Americans with Disabilities Act (ADA) in 1990 and its initial enforcement in 1992, it appears that employers have become very interested in learning more about deafness and hiring deaf workers. Along with a national movement towards diversity in the workplace, there

seems to be a fair degree of receptivity on many employers' parts, that may not have been quite as evident prior to the ADA.

Many larger companies now have "ADA Coordinators" and "Diversity Managers" in their Human Resource (HR) departments, who are interested in visiting about our program and meeting our qualified students/graduates. "Diversity Job Fairs" are popping up all over. In the Seattle area alone, we have at least five major diversity fair each year that are specifically aimed at bringing candidates of diversity together with HR recruiters. One of these, *Access '96*, is held at the Seattle Center each year and is specifically for people with disabilities.

In addition, I attend at least three other diversity groups that meet regularly -- Puget Sound Diversity Network, Eastside Diversity Taskforce, and the South Puget Sound Diversity Taskforce. These are excellent places to network with just the diversity business recruiters who are especially interested in meeting our students, and working with us regarding reasonable job accommodations, and other types of post-placement follow-up to ensure that our students are successfully integrated into the workplace.

The bad news is that at this same time the United States workplace is changing very fast, and in ways that are not auspicious for many of our students. For instance, employment opportunities are growing fastest among small businesses, and slowest among large corporations (many of which are "downsizing"). Many of these small businesses are not even covered by the ADA because they have fewer than 15 employees.

Services to Employers

- Introductions to qualified and job ready RECDS candidates
- Scheduled business recruiter visits to RECDS to meet qualified and job ready students/recent graduates
- Half-day and full-day workshops at SCCC: *Working Together: Deaf & Hearing People*
- Presenting on-site workshops to educate potential employers on hiring and successfully integrating deaf employees into their workforces
- Presenting on-site orientations in specific departments where RECDS students have just been hired to facilitate co-worker communication and getting the placement off to a good start
- Evaluating the possible need for job accommodations for specific positions
- Assistance in locating and arranging reasonable job accommodations
- Informing employers of RECDS's evening classes in *Computer Literacy* and *Workplace English* and the *Climbing the Career Ladder* support group offered at SCCC and conducted in ASL to assist deaf adults advance their workplace skills and competencies
- Assistance in setting up sign language classes in the workplace
- Referrals to other Deaf Community resources as needed (e.g., interpreter referral service, TTY relay service, places to buy TTYs and other assistive devices, etc.)

- Providing post-placement follow-up services and consultation as needed on an on-going basis. (Cases are not "closed" after 60 or 90 days; relationships with employers are long-term.)

Interagency Service Coordination

A number of our students are funded by VR or may be receiving some employment services other sources (e.g., Washington Vocational Services; Training, Assessment & Placement Program; Employment Security; Workforce Training; International Rescue Committee). Service delivery can be maximized for students by establishing case management teams in these instances -- because different players can contribute different types of support services.

A case in point was that of a deaf woman from Bosnia who had emigrated to the United States as a political refugee with her teenage niece. Before I met her, she was already connected to both the International Rescue Committee (IRC) and to VR. The IRC had assisted her with living arrangements, and getting her and her niece on public assistance. VR had helped her with getting hearing aids and had referred her to RECDS's evening ESL classes for foreign deaf adults. When I first met this woman, she had no English skills and no ASL skills. What she had was good Croatian lipreading skills, Croatian Sign Language skills, and more than 16 years of work experience as an electronic assembler. Putting all the pieces together:

1) RECDS was able to work with this individual (using a Croatian foreign language interpreter) to develop a professional resume and arrange for a job interview with an employer willing to give this individual a chance based on her solid work history.
2) IRC provided a Croatian foreign language interpreter for meetings with me and for the job interview.
3) VR provided on the job support by supplying a job coach and an ASL tutor after this individual was hired so she could quickly develop the English and ASL skills she would need to work successfully as an electronic assembler in an American company.

This story and a number of our other placement successes are profiled in our new publication *Deaf Portraits: College to Career*. Copies are available from the Regional Education Center for Deaf Students.

Intra-Campus and Inter-College Coordination

RECDS is a federally funded program that provides support services to deaf and hard of hearing students in a mainstream community college setting. RECDS is not a degree-granting entity. Thus, deaf students must learn how to navigate through our campus to have access to campus-wide services -- such as registration and financial aid. There are a number of areas on campus where accessibility to employment services specifically arises, and over the past four years we have worked hard to make these programs more accessible to our students. These include: Cooperative Education & Career Placement Office; Work-Study Program; Workforce Training; Computerized Career Library; and International Student Services. Some of

these programs have purchased their own TTYs, and/or now list a centralized campus TTY number on their brochures so that deaf students can call them directly. Most have learned to list that interpreters are available upon request (with sufficient lead time) for the events they sponsor. Staff members from these offices have made special presentations to RECDS students subjects such as: "How to Apply for Work Study Funds?" "Employment Opportunities for International Students," and "What is Cooperative Education?"

Another valuable key to successful job placement for our students is to work closely with the faculty in their respective programs. The Seattle Community College District offers more than 100 different fields of study. Making employer contacts from scratch in fields as diverse as Accounting, Biotechnology, Commercial Photography, Computer Technology, Culinary Arts, Diesel Mechanics, Drafting, Graphic Design, Human and Social Services, Office Occupations, and Opticianry, to name a few, is daunting. Sometimes faculty are in the best position to offer job leads in their respective fields, and since they work directly with our students, they are in the best position to have a realistic sense of their skill levels vis-á-vis the industry standards. Having students get letters of recommendation from faculty in their majors is also very effective.

BARRIERS TO SUCCESSFUL EMPLOYMENT

Students' Barriers to Success

Lack of Job Readiness. Students sometimes come seeking employment, but they do not yet have appropriate workplace skills or understanding. While they may have good academic standing, and perhaps even good technical skills, they may still not be employable for other reasons. This often manifests itself with students who fail to follow the Employment Services Contract. For instance, if a student repeatedly shows up late or simply skips appointments with the Employment Services Coordinator, it is not possible in good conscience to recommend this student to a prospective employer. When students have unacceptable excuses for why they are late (i.e., excuses that would be unacceptable in the workplace such as "I ran out of gas." "I lost my keys." "I missed the bus." "My mother needed me to baby-sit my brother."), it is also not possible in good conscience to recommend these students to prospective employers.

Some students, perhaps because of having been overprotected for so many years by family and school systems serving deaf youth, have little understanding of what is expected in the workplace. If they grew up in hearing families where there was not good communication with their parents, these students may have missed some key concepts regarding the world of work. These concepts might include: chain of command; taking direction from a supervisor; going through proper channels to resolve problems; understanding that it is generally *not* appropriate to discuss your personal problems with the supervisor; and the need to "pay one's dues" to climb the career ladder.

As with college students anywhere, many RECDS students are young. At age 20-25 many young adults are not fully ready to say good-bye to college life and take on the adult responsibilities of full-time employment. There may also be the issue of leaving the security of the campus, particularly a "deaf-friendly"

campus and the fear of going out into the "real world" where they may be the only deaf person in their new workplace. Sometimes young people need to take time off, to travel, to experiment, to make mistakes, and to "find themselves." Students such as these may come seeking employment, but it soon becomes clear that their hearts are not fully in it when many other things start taking priority over their job searches.

The primary way we identify these types of students is through the Employment Service Contract. Students who are not job ready, tend to eliminate themselves by violating the terms of this agreement. There is then an objective and verifiable method for putting on hold serious job development and placement efforts until students are more fully committed to finding work and keeping it.

Another category of students who are not job ready are those who need to deal with other issues first -- such as anger management, independent living skills, or personal hygiene and comportment. Some students may have an additional disability which could also significantly impact their employability (e.g., clinical depression). When students are not job ready for these reasons, RECDS tries to work closely with VR to make referrals to those community-based organizations that can provide the types of one-on-one work skills building, pre-employment training (e.g., community-based assessments, supported employment), and counseling that RECDS does not offer.

Inadequate English Skills. At the community college level, an ever-increasing number of degree and certificate programs are requiring students to successfully complete higher levels of college English to graduate. Within the Seattle Community College District in recent years, increased English standards are being required for students to enter vocational programs such as Carpentry, Auto Body Repair, and Baking. For other majors, such as Printing (now called "Graphic Imaging and Printing"), Graphic Arts, and Photography, the even higher level *English 101* is now required for graduation.

We observe that many of our students are having a tough time with these new, more stringent English guidelines. It is not unusual to see deaf students who have successfully completed all degree requirements in their major, but who either: a) need to defer graduation for several quarters because they have not satisfactorily completed their English requirements; or b) opt to graduate with a certificate instead of a full Associate of Applied Science (AAS) degree because they could not, or chose not to, complete the English requirements.

This same trend is widespread at vocational schools as well. For examples, in the Seattle area, what was formerly called "Lake Washington Voc Tech" has been renamed "Lake Washington Technical College." Along with the name change has been a significant stiffening of the English and math requirements in almost all degree-granting programs.

There are real and practical reasons for these tougher requirements; the world is changing. Many career paths that did not previously require high level reading and writing skills (i.e., the traditional trades) now do -- particularly because of the ubiquity of computers in virtually all sectors of the modern work world.

According to a recent article in *Gallaudet Today* (Fall, 1995) entitled *Literacy: Key to the Future*, "...As we approach the 21st century and as technology becomes increasingly important in the workplace,

workers are finding that they must look back to two basic skills still necessary for them to succeed--reading and writing." Or as Terry Coye, Coordinator of Gallaudet University's new *English Literacy 2000* program points out in the same article, "The nature of work is changing. People need to use and create information, not just modify it and pass it on." At Gallaudet, strong recommendations have been made, and are expected to be adopted, that the University should increase its admissions standards in terms of applicants' English reading levels because they are "...the best predictor of success in college."

General Knowledge Gaps. Not surprisingly, since deafness generally leads to a profound lack of access to general information, some of our college students have large gaps in their general knowledge base. For example:

- One student wanted to know why money was coming out of his paycheck each week. While he had heard of "taxes," he really didn't understand what taxes were, what they were for, and how they worked.
- On his resume, one student listed his phone number as "TTY/V," even though both he and his housemate were deaf and used only the TTY. He did not understand that this could confuse a potential employer if he/she called on voice and got TTY beeps which in turn could seriously hurt his job search efforts.
- Many of our students, even though they use computers daily and have taken numerous computing classes, still seem to have a poor grasp of some very fundamental concepts. They often don't fully understand the difference between hardware and software, what an operating system is, or the difference between an operating system and a software application.

Disincentives. Perhaps the most pervasive barrier to students finding and maintaining gainful employment is the disincentive posed by federal entitlements. Sometimes students graduate college and show little interest in looking for work. They seem used to living a student lifestyle on a limited income, and just continue to do so after they graduate. Sometimes students appear to have black and white thinking about SSI/SSDI. Namely, they believe that if they work at all, even part-time or over the summer, that they will be immediately and permanently cut from SSI and SSDI. Often students do not have a good understanding of how their SSI/SSDI benefits are calculated, or the types of exceptions that are possible if they are working only temporarily or part time. Similarly, they are not aware of set-aside plans after they are employed (i.e., IRWE and PASS) that might allow them to convert their SSI/SSDI benefits into major personal purchases, such as a car or a computer, that would make them more independent wage earners. Much more educating of students is needed in this area.

"SSI Syndrome" can have a significant impact on student motivation. One student was offered a full-time summer job at $10/hour in his major. This was an incredible opportunity for him. Yet when he was told he had been offered a high-paying summer position, his first response was that he didn't want it. Initially he said the job was "too far" away and he didn't want to commute. Then, he said it was "too late" in the summer

to take a job (it was mid-July and he had already given up on expecting to find a summer job). Then finally this student said, "SSI."

Unrealistic Expectations/Lack of Understanding "The System." Another barrier to gainful employment is that students sometimes have unrealistic expectations of where they fit in the labor market. Today's employers are demanding more and more high level skills from job candidates even for entry level jobs. I see many more advertised positions requiring bachelor's degrees that never used to, such as secretarial positions. A two-year associate's degree equates to "entry level." Students sometimes need to be willing to take a job at a lower level or pay scale than desired simply "to get their foot in the door." And to advance in the company, one must be willing to put in the time to "pay one's dues." It is a slow and painstaking process.

College's Barriers to Success

Is There a Double Standard for Deaf Students? One tragic hallmark of deaf education in the United States has long been that teachers and educators tend to hold significantly lower expectations for deaf students than their hearing peers. In 1988, the federally appointed Commission on Education of the Deaf, chaired by Dr. Frank Bowe, presented its report and recommendations to the U.S. Congress and the President. In 1988 the Commission found that overall state of deaf education in this country to be "abysmal."

That perpetuation of a double standard for deaf students sometimes continues into college. There are instructors who feel sorry for deaf students may grade them more leniently. There are instructors who do our students a grave disservice by passing them and letting them graduate even when they are not close to being competitively employable in their chosen fields. This gives students a false and inflated sense of their skills and abilities, and sets them up for some very rude and painful awakenings down the road.

Do Students Understand and Know How to Use Available College Resources? Students sometimes do not know how to successfully navigate through "the system." They may not be fully aware of resources available to them and/or may let valuable opportunities slip by. Some of these missed opportunities include:

- Not understanding about financial aid, and the tips on how to successfully apply for it
- Not understanding about the federal and state work-study programs and how becoming eligible for work-study greatly increases a student's chance of getting a job on or off campus since the employer pays just a small percentage of the salary
- Not understanding student reporting responsibilities to VR, to ensure continued support and eventually job placement assistance

Employers' Barriers to Success

Attitudinal Barriers and Fears. While there is much focus among employers today about hiring candidates from diverse backgrounds and while the ADA has certainly heightened many employers' sensitivities about not discriminating against a large segment of the job pool, there is still much educating to be done. We find our

half-day and all-day workshops, *Working Together: Deaf & Hearing People*, are tremendously well-received and well-attended. These workshops provide a safe and supportive environment for employers to learn and ask questions about deafness and Deaf Culture, participate in a variety of sensitivity training exercises, learn some basic work-related signs, and to generally develop a much better appreciation for how to bridge the communication gap between deaf and hearing workers.

Testing procedures. Some companies have standard testing procedures that all applicants must take to considered for employment. Unfortunately, some of these written tests may unfairly screen out otherwise qualified deaf applicants (and probably other individuals as well for whom English is not their first language) because of their English level. In other words, they end up testing the job candidate's English skills rather than the subject matter they are really looking for. In some cases, alternative forms of testing that are not culturally biased are needed.

One example of this is the "ethics testing" that a number of large employers now use to predict who will be a loyal and honest employee. In this type of test, applicants are given many hypothetical situations and asked what they would do. When administered to a general population, these tests enjoy a very high ability for predicting who will be a successful employee. However, when Associated Grocers gave their ethics test to a group of 13 deaf applicants last year, only one of the 13 passed. These individuals were applying for general stockroom positions -- jobs that would not require high level English reading and writing skills.

At Nordstrom stores applicants must pass a business math test to be considered for anything but the most entry level positions. The business math test is partially composed of word problems, and almost all deaf students who have taken the test have failed it. Again, it is important to separate out what part of the test is assessing math and problem-solving abilities versus what part is testing English skills. A future goal is to work with these and other companies to help develop alternate testing formats (i.e., videotaped in ASL) when appropriate.

Concerns about Worker Safety. Despite facts and figures to the contrary, many employers are still nervous about deaf workers and safety issues. Some cases are very poignant. One former student has been working part-time for United Parcel Service for more than three years. He is an excellent employee who has twice been named "Employee of the Month," and would normally have been promoted to a full-time driver long ago based on his excellent work performance. But the driver position required a Commercial Drivers License (CDL), and the CDL requires passing a hearing test. This individual is still stuck in a catch-22. Even though he drives his van to work and back every day, UPS is not legally able to allow him to drive one of their vans on the job.

Again, more education is needed to alleviate employers' initial fears and to inform them of straightforward and rather inexpensive accommodations that will make the workplace safer for *all* workers -- such as visual fire alarm systems, strobe lights on fork lifts, flashing lights of office machinery and other types of equipment, use of a "buddy system," use of alpha-numeric pagers, etc.

Lack of Thinking of Alternative Ways to Do the Job. Sometimes employers are used to thinking of a job being done in just one given way (i.e., the job includes some phone work), without necessarily having analyzed fully which job duties are truly "essential" and which are "non-essential." By sitting down with the employer and openly discussion the demands of the given workplace, we have found it is often possible to come up with a modest restructuring of job duties that works for everyone. The key is to start the dialog and to engage the employer in some creative thinking.

Telephone Impressions. Unfortunately, the telephone still presents a formidable barrier to RECDS students who attempt to undertake the job search process on their own. Despite the availability of a 24-hour TTY relay service and/or the availability of telephone interpreters, employers do not tend to respond well to direct telephone calls from our students. Generally, students who attempt to call employers directly for the first time through either the relay service or through an interpreter meet with rejection. Like it or not, we find that employers are still not familiar enough nor comfortable enough with operator-mediated or interpreter-facilitated calls to have this be an effective means for a first contact with a potential employer. Following an interview, the use of the relay service and telephone interpreters is fine. But that initial first impression to an employer is critical, and the telephone represents a significant disadvantage to a deaf candidate. However, if the employer has a TTY line, then this seems to be an effective and positive way for the student to make contact with the potential employer, providing the student has good English skills.

CONCLUSION

It has been very gratifying and exciting to see so many of our RECDS students/graduates enter the job market in a wide variety of fields. Especially thrilling is seeing our students break into fields and industries that have traditionally not been well-represented by deaf people. For example, last June our first student graduated from SCCC's Biotechnology program and is now working full-time at Targeted Genetics as a research technician. He is their first deaf employee. Next week this graduate and I have been invited to speak to a group of human resource managers from at least 20 more Puget Sound biotechnology companies specifically on the topic of how to hire and successfully integrate deaf employees into this fast-growing industry.

Another recent graduate is now a full-time computer service technician at Active Voice Corporation in Seattle where he is their first deaf employee. At one of our recent *Working Together: Deaf & Hearing People* workshops aimed at employers, this graduate and his supervisor were part of an employee/employer panel discussion. They shared with workshop attendees what steps they had taken thus far to make workplace communication and integration happen. This RECDS graduate currently teaches a weekly sign language class to his co-workers at Active Voice. These and many more of our success stories are highlighted in a new RECDS publication entitled *Deaf Portraits: College to Career.*

At the same time, however, there are still many barriers and challenges that lie ahead. There are barriers on the student side, barriers on the employer side, and brand new barriers cropping up due to the sweeping and dramatic changes we are currently witnessing in the overall structure of the U. S. workplace. English competency is more important than ever, and employers are demanding more than ever. By the year 2000, it is predicted that 80% of all jobs will require the equivalent of at least a 2-year college degree. Incredibly rapid technological advances are changing the very nature of how we do our jobs and where we do them (i.e., telecommuting). These are all factors we must consider when thinking about the employment future for our students.

Career Success of Deaf and Hard of Hearing Graduates: Preliminary Findings of a Ten-year Study

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Colleges and universities periodically do alumni surveys to obtain feedback on the quality and relevancy of their education. These surveys often focus on information about the educational, occupational, and economic attainments of the alumni which are important in demonstrating the "economic pay-off" of their education. This information is often helpful to college administrators and service providers for such purposes as justifying requests for public funding and guiding institutional planning and development. During an era of cuts in state and federal money for education, documenting program success through such means as alumni surveys takes on added significance.

Surveys of deaf and hard of hearing alumni have been conducted by Gallaudet University (e.g., Rawlings, Karchmer, King, and Brown, 1985) and the National Technical Institute for the Deaf (NTID) (see Marron, 1982; and Schroedel, 1982, for example). Fisher, Harlow, and Moores (1974) reported results from a survey of deaf and hard of hearing alumni from three two-year postsecondary programs. A few alumni surveys have focused on national samples, including Crammatte (1987) and Schroedel and Watson (1991).

Although an exhaustive review of alumni surveys is beyond the scope of this manuscript, three observations can be made. First, among deaf alumni from various alma maters, the type and level of occupation they are employed in depends in part on the type of college attended and level of degree earned. For instance, surveys of deaf alumni from Gallaudet University and NTID provide some contrasting information. Rawlings, et al. (1985) found that 42% of Gallaudet's graduated alumni had eventually completed either a master's or doctoral degree and 52% worked in four occupations: elementary or secondary teaching, postsecondary teaching, counseling, and school or program administration. In comparison, 81% of graduates from NTID between 1969 and 1979 had either vocational or associate's degrees and 74% worked in professional, technical, or clerical occupations (Marron, 1982; Schroedel, 1982). With type of college having this effect, one must be careful in making conclusions about alumni from different colleges.

Secondly, time is a factor in comparing studies done in different years with different alumni. Time confounds comparisons between the results of alumni surveys conducted at different points in time with different participants. Alumni surveys tend to provide snapshots of the participants (that is, information collected at one point in time), rather than information collected over time from the same participants.

Thirdly, it was found repeatedly that deaf males on the average earn 30% a year more than deaf females (Armstrong, 1981; Brown; 1987; Crammatte, 1987; Fisher, Harlow, & Moores, 1974; Rawlings, et al., 1985; Welsh & Walter, 1986). In a national study of 116 deaf alumni from 33 special colleges, deaf males earned $3,700 a year more than deaf females (Schroedel & Watson, 1991). This pattern goes back at least to the 1960s (Quigley, Jenne, & Phillips, 1968) and continues into the 1990s (Rawlings, King, Skilton, & Rose, 1993). It exists even though deaf females are generally more likely to complete bachelor's and master's degrees than are deaf males (Schroedel & Watson, 1991). This pattern is just the tip of an iceberg representing a set of complex topics in gender and employment. These topics deserve broad and deep examination.

Purposes

What is needed to address questions about career trends for alumni who are deaf or hard of hearing in general, rather than from one institution, is a survey of alumni graduating at the same time from representative postsecondary programs and who have been tracked over time for information. This article reports on the results of such a project. It focuses on (a) early career attainments such as employment status, pay, job satisfaction, and promotions ten years after embarking on a career, (b) comparisons of alumni attainments for 1989 and 1994 to observe any relative changes, and (c) comparisons of career attainments of males and females to determine the extent to which gender is related to career success in such areas as pay, benefits, and advancement.

METHOD

Sample

The sample consisted of 325 deaf and hard of hearing participants. Two-thirds of the sample (67%) considered themselves to be deaf, with the remainder (33%) reporting themselves to be hard of hearing. The large majority were White (92%) and participants were about equally distributed in terms of gender (53% female and 47% male). Regarding marital status, 55% were married, 37% single, and 8% divorced or widowed. Average (both mean and median) age was 32 years (ranging from 28 to 60). About one in four (26%) participants had continued their education by earning a degree beyond the one they had received at the initiation of the project ten years earlier. The current distribution of degree levels included vocational (29%), associate's (20%), bachelor's (32%), and master's or higher (19%).

Procedures

Participants were members of the graduating classes of 1983, 1984, and 1985 from 47 special postsecondary programs, including two- and four-year colleges and technical institutes. Prior to graduating during their final year on campus, individuals in the classes of 1984 and 1985 were invited to participate in the longitudinal study and were informed that this was voluntary (Schroedel & Watson, 1991). Five years later,

follow-up surveys were administered to those individuals in the classes of 1984 and 1985 who had agreed to participate; additionally, to increase the sample size, members of the class of 1983 were later invited by mail to participate in the five-year follow-up study. Subsequently, a ten-year follow-up survey was administered to alumni in all three classes who had completed the five-year follow-up survey. Results presented here are based on the combined results from the five-year follow-up survey administered in 1988/1989 and the ten-year follow-up survey administered in 1994. When each survey was administered, participants were informed of the voluntary basis of their participation and that their individual responses would be confidential. Details about each survey are presented below.

Five-year Follow-up Survey. Five years after graduation, about 83% of participants completed mail survey forms which gathered comprehensive work history information, personal and family information, and information about their work environment, use of social services, and additional educational attainments (El-Khiami, 1993). A total of 490 deaf and hard of hearing alumni completed the five-year follow-up questionnaire.

Ten-year Follow-up Survey. The ten-year follow-up survey gathered personal and family information, additional educational attainments and quality of life information, plus detailed information about employment status, current job, and job satisfaction. Mail and phone efforts to trace the 490 people who participated in the five-year follow-up survey yielded a sample of 400 potential participants (82% of the 490). Four mailings of the ten-year follow-up survey questionnaire netted a response rate of 80%, or 325 completed survey forms from the 400 traced alumni.

RESULTS

Data from the 10-year follow-up survey are in the process of being analyzed. Preliminary findings in three general areas will be discussed. The three areas to be addressed are as follows:

a) Current employment status of survey respondents and work-related information;
b) Comparisons of selected attributes of respondents' work situations five and ten years after completing their degrees; and
c) Exploration of gender differences on selected employment characteristics.

Employment Status

The large majority of the participants were employed (84%), with 5% unemployed (but searching for work), and 11% not in the labor force (see Figure 1). Over half of those not in the labor force (60%) were raising their family; other reasons given for not searching for work were "going to school" (30%), "can't find a job" (8%), or "too sick" (2%).

Among the employed respondents, most reported that they worked for a private business (51%), while others worked for government (23%), school systems (17%), or service programs (9%). Also, most of the

employed participants reported receiving job benefits: with 88% receiving annual leave, 84% health insurance, 84% sick leave and 71% a retirement pension program. When asked about sources of income, 84% cited a job as a source of income. The percentage of participants who reported receiving other sources of income ranged from a high of 11% for money from parents to a low of 2% receiving welfare/food stamps (see Figure 2). Thus, the large majority of respondents were economically self-sufficient.

Five- and Ten-Year Comparisons

The median annual job-related income in 1994 for employed participants fell in the $20,000 to $25,000 category, up from the median annual income for 1989 which fell in the $15,000 to $20,000 category. Incomes are unadjusted for inflation. When asked if they were satisfied with their jobs, a combined 86% indicated that they were either satisfied or very satisfied, and 14% were dissatisfied. Essentially identical figures were obtained for these participants with respect to their job satisfaction five years earlier.

As an additional way to characterize participants' jobs, jobs held in 1989 and 1994 were classified by occupational category, as presented in Figure 3. Most participants in 1994 worked in professional, technical or managerial occupations (53%), with 24% in clerical or sales occupations, 15% in crafts or machine operative occupations, and 8% laborers or service workers. The percentages of participants working in each of these four occupational categories had not changed substantially since the five-year follow-up survey (1989), although there was an increase in the percentage of participants working in professional, technical, or managerial occupations (where 46% had worked five years earlier) and a corresponding decrease in the percentage of participants who had been working in clerical and sales occupations (where 32% had worked five years earlier).

Gender Differences in Employment

The third focus of this paper is the topic of gender differences in employment and the differences in work-related outcomes between males and females during 1994. Preliminary analyses suggest that males are reporting outcomes which appear somewhat more favorable than those reported by female participants. With respect to annual salary, the median annual salary for males ($25,000-$30,000) exceeds that for females ($20,000-$25,000). Thus, males were earning about $5,000 more a year in income, or about 20% more than females. Moreover, somewhat more males than females reported receiving each of four types of benefits. The corresponding proportions of males and females receiving each of four job benefits were: health insurance (males, 88%, females, 80%); retirement pensions (males, 72%, females, 69%); annual leave (males, 93%, females 83%); and sick leave (males, 88%, females, 80%). About the same proportion of men (31%) and women (27%) indicated that they supervise other workers.

More men than women indicated that they had received promotions: specifically, 38% of the men and 24% of the women reported receiving two or more promotions during the past five years, 20% of the men and 22% of the women reported receiving one promotion, and 42% of the men and 54% of the women reported

receiving no promotions. From another perspective, the proportion of males with two or more promotions was somewhat more than 25% larger than their female counterparts.

The disparities in earnings and job benefits between males and females in this study are even more perplexing after one compares the educational attainments of the two groups. As presented in Figure 4, the proportions of females with bachelor's or master's degrees exceeds those of males. Despite overall higher educational attainments, females lag behind males in economic attainments, a condition which has persisted for some time across the nation. A possible explanation for this condition is that higher levels of education do not necessarily guarantee entry into higher paying occupations. Several occupations which require two-years of technical training offer highly competitive wages, relative to occupations requiring more advanced degrees. Thus, a higher degree does not necessarily qualify a person for a better paying job. As shown in Figure 4, the percentages of males with either vocational or associate's degrees are larger than for females, possibly accounting for the higher earnings of male participants. Nevertheless, because educational attainments clearly do have an impact on occupational attainments (as discussed earlier), it is all the more important to find that the less favorable employment outcomes reported by females do not seem to be a result of lower educational attainments.

In a preliminary effort to understand why the male participants appear to have experienced somewhat more favorable outcomes than the female participants, two possible explanations have been considered. First, a greater number of females than males worked in part-time jobs: 6% of males and 18% of females worked in part-time jobs. Part-time jobs tend to have lower hourly pay and fewer benefits. Future analyses will examine the relationships between number of hours worked, job benefits, and wages between males and females. Secondly, it is possible that female workers have entered jobs which tend to pay less and tend to offer fewer benefits. With respect to occupational category, males seem to work in the more lucrative occupations. According to Figure 5, for example, 22% of the males and 7% of the females reported working in crafts and machine operative occupations, which tend to offer high pay and good benefits. Conversely, fewer men (19%) than women (29%) reported working in clerical or sales occupations noted for their relatively low pay and relatively modest benefits. In the professional, technical and managerial occupations, men (51%) and women (55%) were employed at about the same frequency, as was true for men (8%) and women (9%) who reported working as laborers or service workers. Similarly, it is possible that men have been hired by companies which tend to offer better pay and benefits. More men (57%) than women (46%) work for private business, and more men (27%) than women (18%) work for government agencies. Conversely, more women (23%) than men (11%) work for school systems, and more women (13%) than men (5%) work for human service programs. Government agencies and private businesses may provide better pay and benefits than service programs and school systems. These difference may account for the generally more favorable work outcomes that males have reported compared to females. Additional analyses are planned to further explore this possible explanation.

Discussion

Ten years after college most of the respondents in this survey were doing well in life. The large majority were economically self-sufficient; 84% had income from a job. Median income for 1994 was in the $20,000-$25,000 bracket, about $5,000 higher than five years earlier. A majority (53%) worked in professional, technical, or managerial jobs. This percentage for 1994 was larger than for 1989. The fact that 26% had received another degree in the past ten years contributed to these career attainments. In several comparisons, respondents were doing better economically and occupationally in 1994 than in 1989. A conclusion to be reached from these findings is that the educational and occupational success of these alumni justifies continued support for public investment in education. These alumni are productive citizens making worthwhile contributions to society.

One of the problem areas identified by the survey was the finding that females were earning about 20% less than males, were less likely to get job benefits, and reported fewer promotions on the job. The pay differential is well documented in the literature; however the findings from this study show that gender differences favoring males extend beyond differences in pay. Adding to the perplexity of the topic, it was found that females were more likely to complete bachelor's and master's degrees than were their male counter parts. Among the prospective explanations for these differences were: (a) females were three times more likely to work in part-time occupations, and (b) females were less likely to work in jobs with better socioeconomic quality (for example, fewer females than males worked in private business or for the government where better jobs may be available).

Several recommendations are offered for postsecondary service providers on the question of gender gaps in employment. One practical suggestion is to encourage more females to enter college majors in technical and scientific fields where they are under-represented (Schroedel, 1987; Schroedel & Watson, 1991). Another suggestion is to inform deaf college students about better employment prospects in expanding growth jobs of the future. Information on these jobs is available in Geyer and Schroedel (1995) and Schroedel and Geyer (1996).

Figure 1
Employment Status 10 Years after Graduation

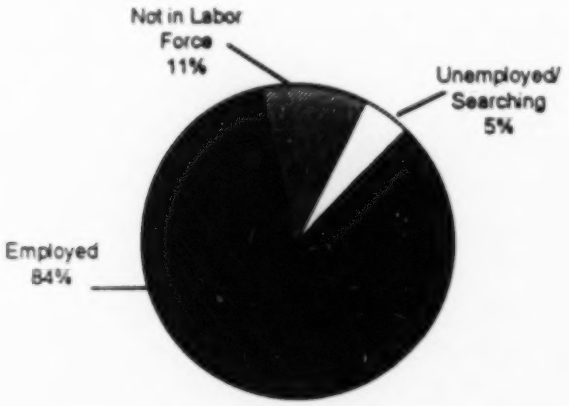

Figure 2
Sources of Income 10 Years after Graduation

• Jobs	84%
• Parents	11%
• SSDI	9%
• Medicare	6%
• SSI	5%
• VR Services	4%
• Unemployment Insurance	4%
• Welfare/Food Stamps	2%

Figure 3

Occupational Category 5 and 10 Years after Graduation

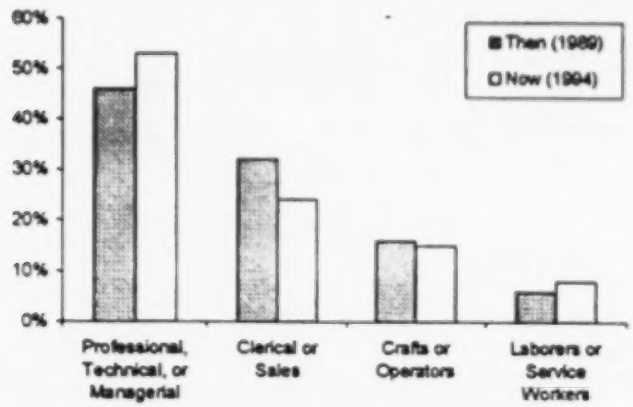

Figure 4

Occupational Category 10 Years after Graduation by Gender

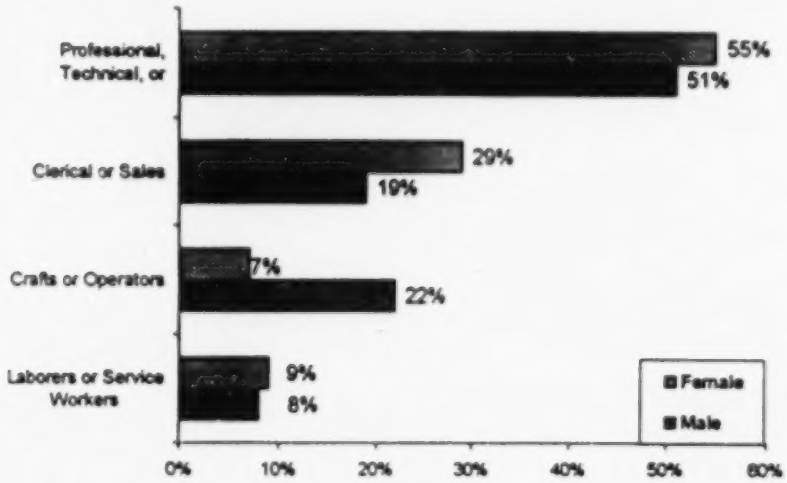

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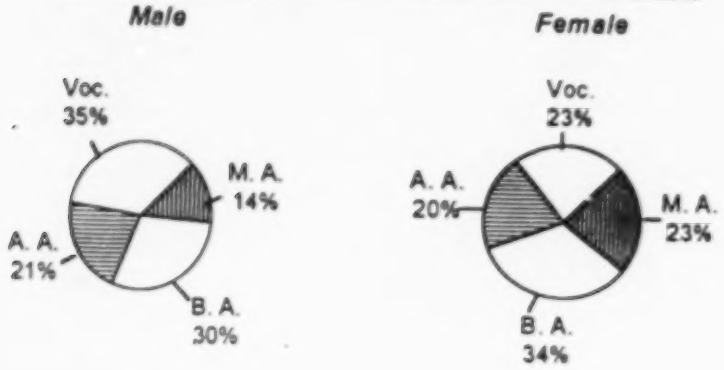
Figure 5

Highest Degree Attained 10 Years after Initial Graduation by Gender



References

Armstrong, D.F. (1981). Income and occupations of deaf former college students. Washington, D.C.: Gallaudet College Institutional Studies Report No. 81-6.

Brown, S.C. (1987). Predictors of income variances among a group of deaf former college students. Journal of Rehabilitation of the Deaf, 20(4), 20-30.

Crammatte, A. B. (1987). Meeting the challenge: Hearing-impaired professionals in the work place. Washington, D.C.: Gallaudet University Press.

El-Khiami, A. (1993). Employment transitions and establishing careers by postsecondary alumni with hearing loss. The Volta Review, 95, 357-366.

Fisher, S.D., Harlow, M.J.P., & Moores, D.F. (1974). Postsecondary education programs for the deaf: External view; Monograph 2 of 6. (Report of USOE/BEH Grant No. 0-09-332189-45033-032). St. Paul, MN: University of Minnesota Center in Education of Handicapped Children (Report No. 61). (ERIC No. ED 106 999).

Geyer, P.D., & Schroedel, J.G. (1995). Employment trends for occupations requiring a bachelor's or higher degree: 1992 and 2005. JADARA, 29(2), 37-43.

Marron, M. (1982). Determinants of mobility among deaf graduates of the Rochester Institute of Technology. Rochester, NY: NTID at RIT Institutional Planning and Research Technical Report No. 48.

Quigley, S.P., Jenne, W.C., & Phillips, S.B. (1968). Deaf students in colleges and universities. Washington, D.C.: A. G. Bell Association.

Rawlings, B.W., Karchmer, M.A., King, S.J., & Brown, S.C. (1985). Gallaudet College alumni survey, 1984. Washington, D.C.: Gallaudet College Research Institute Monograph No. 2.

Rawlings, B.W., King., S.J., Skilton, J.C., & Rose, D.E. (1993). Gallaudet University alumni survey, 1993. Washington, D.C.: Gallaudet University Research Institute and Office of Institutional Research.

Schroedel, J.G. (1982). Socioeconomic attainments of technical college graduates who are deaf. Paper presented at the District of Columbia Sociological Society, Washington, D.C.

Schroedel, J.G. (1987) In A.B. Crammatte (Ed.), (1987). Meeting the challenge: Hearing-impaired professionals in the work place. Washington, D.C.: Gallaudet University Press.

Schroedel, J.G., & Geyer, P.D. (1996). Employment trends for occupations requiring a sub-bachelor's degree: 1992 and 2005. JADARA, 29(3).

Schroedel, J.G., & Watson, D. (1991). Enhancing opportunities in postsecondary education for deaf students. Little Rock, AR: University of Arkansas Rehabilitation Research and Training Center on Deafness and Hearing Impairment.

Welsh, W.A., & Walter, G.G. (1986). Earnings of deaf RIT graduates as reported by the Internal Revenue Service. Rochester, NY: NTID at RIT Center for Postsecondary Career Studies and Institutional Research.

Deaf Supervisors of Hearing Employees: A Profile in Progress

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Abstract

Deaf and hard-of-hearing postsecondary graduates from a national technical college were surveyed to identify who among them were supervisors of primarily hearing employees. The sample was selected based on past job information they provided and referrals solicited from the college community. Questions about current job title, span of responsibility, communication modes, and supervisory experience were included to identify graduates who met our supervisor criteria. A profile of these graduates is provided along with discussion of the positive and negative aspects they associated with supervising other employees. Outcomes from this phase of the study will be used as a guide to exploring the results in more depth during interviews with deaf and hard-of-hearing supervisors.

Introduction

A substantial body of literature has been written in the last several decades relative to deaf and hard-of-hearing workers[1] and their careers. Their circumstances have been examined in terms of unemployment rates and underemployment (Schein & Delk, 1974; Barnarrt & Christiansen, 1985; Schroedel, 1987; MacLeod-Gallinger, 1989; Welsh & MacLeod-Gallinger, 1991; Foster & Welsh, 1991; MacLeod-Gallinger, 1992; Steffanic, 1992; Compton, 1993); as well as lack of career options and career mobility (Crammate, 1968, 1987; Vernon, 1970; Walter, Welsh, & Riley, 1988; Welsh, 1989; Steffanic, 1992; Compton, 1993; MacLeod-Gallinger, 1992; Mowry & Anderson, 1993). On-the-job accommodations, access to appropriate employment, as well as communication and cultural issues, have been the focus of numerous articles and books relative to deaf and hard-of-hearing workers as well (Schroedel, 1987; Jamison, 1987; Foster, 1988; Foster, 1992; Mowry & Anderson, 1993; Davila, 1993; Mangrubang, 1993).

Legislation both relating to education and labor, have ameliorated some of these circumstances. Most recently, the Americans with Disabilities Act (ADA, 1991) has opened the way for deaf and hard-of-hearing persons and others with various handicapping conditions for greater access to the workplace. Earlier attitudes towards hiring deaf or hard-of hearing workers have been described as "permissive", at best, i.e., "yes, we will hire them but don't expect any accommodation; progressing to "accomodative", which involves restructuring the job somewhat to get around the communication difficulties"; to "facilitative", whereby organizations actually institutionalize special

[1] In this paper the use of the descriptors, "deaf" and "hard-of-hearing" are used. These include anyone who meets the hearing level required by NTID for admission and support services for deaf students. The criteria is a 70 decibel puretone average, i.e.,-a hearing loss of 70 dB or greater in the better ear.

programs within to expand accommodative measures (Jamison, 1987). This is where the ADA, new technology, and awareness in the workplace are moving, i.e., becoming more pragmatic and assistive versus merely acquiescing to hiring workers with special needs. Deaf and hard-of-hearing persons are also learning more about what their on-the-jobs needs are, and feeling more confident about expressing these needs to their employers.

Research on alumni of the National Technical Institute for the Deaf (NTID), one of Rochester Institute of Technology's eight colleges suggests that they are performing very well in many aspects of their employment (Walter, Welsh, & Riley, 1988; Foster, 1992). In particular, postsecondary education has had a consistently positive effect on labor force participation, occupations, earnings, and certain types of career mobility (Welsh & Walter, 1988; Schroedel, 1987). However, there is less data regarding the degree to which NTID alumni are moving into positions of management, particularly when those positions involve direct supervision of employees in settings other than those serving deaf and hard-of-hearing people.

Despite the problems that exist for deaf and hard-of-hearing workers, we know that there are some who either currently supervise hearing employees, or have in the past. The objective of this study is to determine the characteristics and circumstances of NTID alumni who have become supervisors or managers in the course of their employment. The term "supervisor" herein is defined as an employee who directly supervises the work of others, including the performance of such functions as hiring, evaluation, and when necessary, termination. Further, the focus is on deaf and hard-of-hearing supervisors working in environments that are not staffed by or serving primarily deaf and hard-of-hearing people, that is, in what is sometimes described as the "hearing" versus the "deaf" sector of employment.

This paper will focus on results of the first phase of the study which involved identifying, locating, surveying, and profiling potential supervisors among NTID's alumni. The information derived from this initial phase will inform the second phase, when in-depth interviews will be conducted with alumni who fit our defined criteria of a deaf supervisor, and who have expressed a willingness to discuss their experiences.

Methods

Identification of Potential Supervisors. Several strategies were used to identify NTID/RIT alumni who might be supervisors or managers on their jobs. The primary sources of potential supervisors were derived from analyses done using NTID's Alumni Feedback Questionnaire data base; solicitation of the NTID community for names of alumni whom they thought were currently supervisors or managers on their jobs; and an announcement about the study in NTID's Alumni Newsletter.

The Alumni Feedback data file contains information provided by alumni via reiterated surveys sent to them since they have graduated. These surveys have varied in content, but each contained a core of questions including continuing educational activities, employment status, occupations, industries and in some instances, earnings. The Bureau of the Census (1990) occupational codes are used to categorize jobs alumni report on their Alumni Feedback surveys. Potential supervisors were selected by the occupation coded on their most recent questionnaire response.

The NTID faculty and staff were contacted via electronic mail to ask them to please share the names of any alumni they knew of who possibly met our criteria for supervisor or manager on their jobs. They were very responsive to our request. In addition to some of the same names we had also selected from our data base, they provided numerous other alumni prospects. The newsletter announcement let alumni know that the study was being conducted, and if they were interested in participating, to contact us and provide their current address.

Additionally, when completed surveys were returned, information such as last reported occupation and industry, highest degree conferred by RIT, and employment status, was extracted from existing alumni data bases to help verify, compare, and interpret answers alumni gave to similar questions on the supervisor surveys.

The Sample. The combined strategies to identify potential supervisors among NTID/RIT alumni resulted in 213 names. All but ten, for whom addresses were incorrect/unknown, were successfully contacted, resulting in a final sample of 203 potential supervisors.

Current address data files were used to develop the mailing list. Letters were sent with each questionnaire explaining the rationale for the study and how the information gathered was intended to be used to help other students and alumni. Additionally, they were informed that when the study was completed, all who responded would receive a summary of the results. The explanation and request was sent out via our Alumni Relations Officer, with his signature. The authors also signed the letters and were identified as co-investigators of the study.

An incentive was offered to encourage participation. Each potential respondent was informed that five participants would be randomly chosen to receive a gift certificate from a well-known national catalog company who, it was noted, was one of the first to provide a TTY[2] number for customers. Those who responded by a certain date would be eligible for the drawing. In the interim, a reminder mailing was done regarding the survey sent. After the drawing, the winners as well as other participants were informed of the results of the drawing for the gift certificate. A second questionnaire mailing was also done approximately four weeks after the first to give non-respondents another opportunity to complete and return a questionnaire. There were a total of 121 responses to the survey, yielding a 59.6 percent return rate.

The Survey Instrument. The instrument was designed to gather detailed information in a variety of areas including employment history, continuing education experiences, primary job responsibilities, number of other deaf and hard-of-hearing workers at ones' place of employment, scope of supervision (be it of people and/or projects), and past supervisory experience. It also included open-ended questions designed to explore with respondents elements of their work experience, such as strategies they use to communicate with employees and positive or negative aspects of being a supervisor.

In addition to questions pertaining to employment, occupations, supervision, communication methods used, and education, respondents were also asked to provide any telecommunication means by which we could contact them.

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[2] TTY is used in this paper for describing the original teletype machine developed for deaf and hard-of-hearing persons for phone communications. It is the term preferred by many deaf persons. TDD is a more general term which means telecommunication device for the deaf. This term is used in the paper when a respondent specifically used the term "TDD" in comments they wrote on their questionnaires.

Places to list phone number (TTY/Voice), electronic mail address, and a facsimile number were provided on the questionnaire.

Because names and social security numbers of alumni were used, and the personal nature of some questions asked, the survey instrument had to be reviewed and classified by the college's Institutional Review Board relating to use of human subjects in research. The study was classified as requiring informed consent and therefore, signatures were required by respondents in order for their information to be used in the study (see Appendix A: Employment Experiences Survey).

Results

General Characteristics of the Sample

Nearly two thirds of respondents were male, and a little over a third, female. The majority of the alumni who responded were currently employed (92.6%). Nine alumni who did not have jobs at the time they responded to the survey, had either been laid off from their jobs or had quit. One person stated that s/he was in the process of setting up a business, and no one said they had been fired from their last job. Two individuals were unemployed, but actively looking for work.

Seven individuals were technically out of the labor force; that is, they did not currently have jobs, nor were they actively looking for jobs. Three checked that they were not working because they were going back to school; four checked family responsibilities that required their not being in the work force; and two checked that they were too ill to work. A couple of respondents checked more than one reason for being out of the labor force, which explains why there were nine reasons checked instead of one each for the seven who were out of the labor force.

Although one individual had been in the same job for as long as 26 years, and another only one year, half of the respondents had been in the same job for six years or less. This makes sense in view of the fact that nearly half of them also reported that they had made job changes since the last time they responded to an alumni feedback questionnaire. Among the job changers, about two thirds indicated that these were promotions for them. And for the entire sample, nearly 69 percent indicated that they had had at least one promotion during their career. A little over a quarter each noted that the promotion was either initiated by the individual (28.2%) or by their manager (25.6%). Nearly half indicated that the idea of promotion was shared. Promotions and job mobility will be dealt with in more depth during the interview phase of the study. However, looking at this sample of deaf college graduates thus far, stagnation on the job appears not to be a predominating factor (see Slide 2).

A little over 13 percent of the respondents had made changes in both their jobs and industry or company since they last provided information to NTID. In these cases the percentages of females doing so were somewhat greater than for males. Three times as many employees made job changes versus changes in the type of industry in which they worked. This suggests either upward or lateral mobility within one's place of work, or a change to another company or business that engages in the same line of work.

Alumni were also asked if they were owners of a business. Of the 23 individuals who reported owning their businesses (21.6%), three quarters were men. There were two individuals (one male and one female) for whom this business was a secondary enterprise, and not their primary source of income (see Slides 21-23 for the name of businesses owned).

Respondent Profile

Type of job responsibility. Alumni were asked if they (1) supervised other employees, (2) supervised projects, or (3) worked as part of a team. Many respondents checked more than one of the three conditions. Since it is possible in reality to do all three as part of one's job, respondents were counted as potential supervisors, unless they specifically did not check that item on the questionnaire. This did not prevent identification of persons who met our criteria for supervisor, because there were additional, qualifying questions on the survey that allowed distinctions to be made as to who were and were not truly supervisors or managers of people.

Individuals categorized themselves about equally as being supervisors of others (38.4%), part of a team (37.5%), or as project leaders (33.0%). And among those who reported that they owned their businesses, a little over half also classified themselves as supervisors (see Slide 2).

Numbers of Deaf Employees at Place of Work. The range was very wide for the number of deaf and hard-of-hearing persons at a respondent's place of work. There were as many as 600 in one instance, and none at the other end of the spectrum. However, fifteen was the mean number of other employees who were deaf at their places of work. Similarly, numbers of other employees who used sign language averaged twenty three. But more than half of the respondents reported that they worked in environments where there were neither any other deaf or hard-of-hearing persons, nor other users of sign language. Even when there were other deaf and hard-of-hearing employees at their places of work, almost three quarters of respondents said they didn't actually work directly with them. Therefore, the majority were interacting and doing business primarily with hearing individuals (see Slide 3).

Types of Businesses Where Employed. The businesses and industries where respondents are employed for the most part reflect their educational backgrounds and training versus any particular sector of the marketplace. There are some small concentrations in government departments, which has been a major employer of deaf and hard-of-hearing persons. A variety of employers typified the lists for both men and women, although there are differences between the two (see Slides 15 to 20).

Business Ownership. As mentioned previously, 23 respondents reported that they were owners of a business. Most often these were services or consulting businesses, and a few were wholesale or retail sales (Slides 21 to 23 list these for males and females by job title and business).

Continuing Education. Alumni were asked about any kinds of additional education they have had since graduating from college. All but 10 respondents reported some form of continuing education. Over half (53.7%) cited on-the-job training, and almost as many (43.0%) said they had taken courses toward a degree. Many (38.0%) indicated that they took courses specifically to update their skills. Others simply took courses that were of personal interest (24.0%).

Nine individuals were currently in school. Certainly these NTID/RIT graduates demonstrate recognition of the need for life-long learning. This can also be interpreted as an indicator of career mobility in that they are either keeping current in their fields or seeking new opportunities (see Slide 4).

Among those who had taken courses toward a degree there were two associate's, ten bachelor's, 16 master's, and three doctoral degrees earned. This amounts to 28.9 percent of the sample. The programs in which these degrees were earned are contained in Slides 24 and 25.

Supervisors and Non-Supervisors

In addition to being asked if they were currently supervisors on their jobs, alumni were also asked if they were supervisors in a previous job. Forty-three respondents indicated they were currently supervisors of others; 26 of whom reported that they had also held supervisory positions in a past job, and 17 were new to supervising. There were 61 (50.4%) who reported having been supervisors in the past.

For this phase of the study, individuals were categorized as supervisors based solely on self identification as such in their current jobs. All others were categorized as non-supervisors. When individuals are selected for in-depth interviews in the next phase of the study, both current and past supervisory experience will be taken into account. Moreover the selection criteria will include a minimum number of employees supervised, supervision of either exclusively hearing, or a mix of deaf and hard-of-hearing and hearing employees. Experience at hiring and evaluating others will also be criteria.

Supervisors (43) and non-supervisors (78) of people were compared for number of deaf employees and number of employees who used sign language at their places of work, and how many deaf and hard-of-hearing employees they worked with directly, communication modes used on the job[3], and their perceptions about the positive and negative aspects of being a supervisor (see Slide 6 for an overview of Current Supervisors).

Work Environment. On the average, current supervisors were responsible for 14 other employees, although the median number supervised was six. A very small percentage (2.2%) worked exclusively with other deaf or hard-of-hearing employees. More than half worked (55.6%) with hearing individuals only. Less than half (42.2%) supervised a mix of deaf and hard-of-hearing, and hearing workers.

As mentioned earlier, more than half of the respondents worked in places where there were neither any other deaf or hard-of-hearing persons, nor other users of sign language, and therefore were most often interacting with hearing workers. However, there was a significant difference between the two groups in numbers of deaf employees with whom they worked directly. Almost three times as many supervisors (42%) reported that they worked directly with one or more deaf persons than did non-supervisors (14%). The mean numbers, medians, and ranges of deaf and

[3] Communication modes used **overall** versus those used **most often** are discussed in terms of supervisors versus non-supervisors only. They were not presented in the general profile section because our focus for this variable in particular was to demonstrate not only variety of use but differences between the two groups.

hard-of-hearing employees at their places of work, and number of other employees who used sign language were essentially the same as for the sample as a whole (see Slide 10).

Communication On-the-Job. Several examples of types of communication were included in this question. Respondents often cited these, to which they added other modes also used by them at work. Then they were asked to indicate which of these they used most often. The preferred method(s) were not as easily pinned down as originally thought. Some respondents listed the same methods for both cases. This generally suggests that they are flexible and adaptive, using whatever works best in any given situation. Upon closer examination however, differences emerged between communication modes used **overall** and **most often**, and between supervisors and non-supervisors (Slides 7 and 8 lists these).

Supervisors and non-supervisors used a wide variety of methods. Both cited phone/tty as a primary communication tool, followed by speaking. Facsimile, e-mail, interpreters, and relay followed in frequency of use. The most notable difference between supervisors and non-supervisors occurs with use of signing and writing to communicate on the job. Supervisors cited both methods significantly more often than non-supervisors. Moreover, supervisors cited the use of gestures and lipreading more often than non-supervisors. In general, supervisors appeared to have more tools or equipment available, as indicated by reported use of pagers, voice mail, video conferencing, and electronic notes.

A slightly different distribution occurs for methods **most often used**. Speaking tops the list for both groups. Supervisors also used signing quite often, more so than electronic mail, writing, or interpreters. Other than high use of speaking, non-supervisors tended to rely on electronic mail and writing. They also used interpreters only slightly more often than supervisors. Phone/TTY and facsimile played a larger role among non-supervisors (see Slide 9).

Opportunity to learn more specifics about the communication challenges deaf and hard-of-hearing supervisors face in their daily working environments will be provided by way of interviews with selected supervisors. Still, we can glean some insights into the communication issue through analyses of comments made relative to positive and negative aspects of supervising. As one might expect, communication problems and strategies fell out as a primary theme.

Positive and Negative Thoughts about Supervising Others. Two open-ended questions "What do you think are positive..." and, "What do you think are negative things about being a supervisor or manager?" were asked of all alumni. Both positive and negative comments written by each respondent were typed verbatim into a file. First they were read and analyzed for common occurring themes or points. Categories were developed based on these themes. All comments were then scored for number of times a theme or point occurred.

Because communication is an integral component of supervising others, especially for deaf and hard-of-hearing persons, it was subjected to additional analyses in order to distinguish what were communication issues for **any supervisor** versus those specific to **deaf and hard-of-hearing supervisors**. Deaf-related versus general supervisory issues will be examined following discussion of the positive and negative aspects of supervising.

Communication issues related to supervising were categorized under negative aspects. However, as we will learn later, many supervisors described ways in which they were able to take advantage of their position, to make communication a "positive" for them. Slide 11 contains the percentages of occurring themes for supervisors and non-supervisors.

Both current supervisors and non-supervisors thought that the "Opportunity to Lead" and "The Challenge" were key positive aspects of supervising. "Opportunity for Teamwork", however, was deemed a positive aspect by those who were not supervising, more than by supervisors. Having "More Exposure to Information" was cited almost equally by both supervisors and non-supervisors. The two groups differed quite a bit on the positive value they attributed to other aspects of supervising. The ability to "Exercise Vision" was valued more by supervisors, as was the "Opportunity to Educate." "Improved Self-Esteem" was less of an issue for supervisors than for non-supervisors.

Many of these differences were not great. But some of the non-supervisors had past experience as supervisors. Therefore it seemed useful to look at where these themes placed for individuals who had never been supervisors. Interestingly, this group perceived supervising as providing more in the way of personal satisfaction as opposed to enabling them to educate or influence others. For example, "Improved Self-Esteem", "More Job Satisfaction", and "More Perks" were high on the never-supervisors list of positives. "Opportunity for Teamwork" was cited much less often than among non-supervisors as a group (Slide 11).

Looking at the negative side of supervising, "Communication Difficulties" ranked first among the groups. "Problems with Employees" was second most cited as a negative, followed by "Administrative Burdens", and "Stress". Supervisors and non-supervisors mentioned other categories at about the same frequency, except as concerned "Bias toward Deaf Persons" which supervisors viewed as less of a problem compared to non-supervisors. In fact, those in the position to "know", as it were, were less likely to mention deafness-related issues as negatives than were non- or never-supervisors. One possible explanation for this finding is that perspectives based on actual experience are often different than those based on speculation. On the other hand, it could also be that individuals who had aspired to supervisory positions, but were unable to achieve their goal, believed that "Bias toward Deaf Persons" was a major contributing factor (Slide 12).

Of the total number of possible responses regarding supervising, 100 positive and 98 negative responses were given. Some persons wrote only one comment, while others offered several comments in response to the questions. Responses were further broken down into four broad categories: (1) positive comments not related to deafness, (2) negative comments not related to deafness, (3) positive comments related to deafness, and (4) negative comments related to deafness. Within each of these categories, comments were further analyzed for recurring patterns and themes.

The first category consists of **positive comments** that were **not** related to deafness. Respondents described both benefits of being a supervisor or manager, and the qualities they felt were important in a supervisor/manager. Respondents mentioned many types of benefits to being a supervisor. Many said they appreciated the opportunity to improve their organization, or to help it grow. Others focused on material or personal benefits, such as increases in

pay, responsibility, professional growth, status, leadership opportunities, self-esteem, and visibility within the company. Still another type of benefit involved enjoyment derived from working with others, e.g., mentoring and guiding other employees, and teamwork. Lastly, some respondents said that being a manager provided greater access to information and professional networks within the organization, and several said they liked the opportunity to get to know and work with upper management. Examples of qualities deemed important in supervisors included effective communication, assertiveness, fairness, patience, technical competence, and the ability to work well with others.

The second category of response was **negative comments not** related to deafness. By far the most frequently mentioned negative aspect of being a supervisor was personnel issues, including responsibilities for hiring, evaluating, disciplining, and possibly terminating employees. Others complained about the long hours expected of managers, a condition which was exacerbated when it occurred without additional pay. A third kind of negative comment involved reflections on the pressures and stress associated with management, including social isolation and having to make difficult decisions. Several mentioned the increased level of responsibility as a negative factor, as well as the administrative aspects of supervision, including meetings, policies/regulations, and paperwork. Lastly, several respondents said they felt the politics involved in management was a negative aspect of the job. Examples of qualities which were described as negative in a manager included poor communication skills, a negative attitude (failure to praise, looks for flaws, critical, demanding), a lack of authority, presence, or decisiveness, failure to support growth in one's employees, and favoritism.

Positive comments related to deafness comprised the third category. They tended to focus on two areas - attitude and communication. Several respondents felt that, as a deaf or hard-of-hearing supervisor, they were able to provide a positive role model for deaf and hard-of-hearing people as well as hearing people to show others that "deaf can do it." Other positive responses related to attitude included the opportunity to spread an awareness of deaf culture and the power to influence company policy and direction with respect to deaf or disabled persons.

Respondents also offered positive comments associated with communication. For example, several noted that as supervisors they have more control over communication and are able to "enforce" effective communication. In a similar vein, a respondent said that his/her employees are taking sign courses and learning how to use a TDD. Another said that s/he has more "control" over communication, and that the employees "listen to" him/her more now, rather than the other way around. Other examples of positive comments related to communication include being able to get technology and services to support communication (TTY, e-mail, interpreters), having a staff assistant who "listens" for the deaf person, and the notion that deaf supervisors have more time to focus and become better observers than hearing supervisors because they "don't need to communicate as much."

The final category focused on **negative comments related to deafness**. Again, comments involved either communication or attitude. Some people were very general in discussing negative aspects of communication, noting simply that there was "too much communication," "communication hardship," "miscommunications," or "communication barriers." Others were more specific.

Several people commented on problems with support services. In this vein, some cited difficulties scheduling interpreters or finding money in the budget to pay them, and one person said that it was difficult to control a meeting even with an interpreter. One respondent complained that s/he was not able to get everything at meetings without a notetaker because people sometimes mumble, while another said that the typing skills of the notetakers was sometimes poor. Many said that the phone presented problems - some simply observed that they could not use the telephone with voice, while others said that customers were not always patient or willing to use the relay service.

Several respondents focused on difficulties associated with interpersonal communications with particular people or under specific conditions. For example, one person had difficulty handling communication with upper management, while another described difficulties getting complete information from business partners. A third person said that when the interpreter was not present, the "hearing employees forget you're deaf." A fourth responded pointed out that it is difficult to communicate with new employees, and that it takes time to teach them sign language sign language; the alternative (finding a hearing employee who knows ASL and can be trusted) is even more difficult.

Negative comments pertaining to attitude focused on attitudes of hearing co-workers or company management. Several said that it was difficult for deaf people to get promoted because there was a lack of trust, faith, understanding, sensitivity, acceptance, or knowledge on the part of hearing management. For example, one person said that hearing people think that deaf people can't handle management responsibilities such as meetings, or don't want to spend the money for interpreters. Another person commented that "employees don't like having a deaf or hard-of-hearing person over them, upper management (hearing people) doesn't like the idea of deaf or hard-of-hearing people being the 'experts' in the field of deafness--they don't like to listen to a deaf person and/or don't accept a deaf person's management style."

Profile/Summary

General

Two thirds of respondents are men; one third women. The majority are currently employed (92.6%) and had been in their jobs an average of six years. Nearly half had made job changes since last responding to an alumni survey. The majority of respondents (68.6%) had had at least one promotion during their years of employment. Therefore, they were either laterally or upwardly mobile. Nearly a quarter were owners of a business (75% men).

Approximately a third each of the respondents noted that they supervised others, worked as part of a team, or supervised projects.

Half of the respondents worked in environments where there were neither any other deaf or hard-of-hearing persons, nor users of sign language. Even when there were other deaf and hard-of-hearing employees, nearly three quarters indicated that they did not work directly with them.

Twenty eight percent of the respondents had earned additional degrees and nine were currently enrolled in school. Most had received some kind of additional education. In order of frequency, the types of continuing education received were: on-the-job training; courses toward a degree; courses specifically to update skills; or simply courses for

personal interest. It appears that on the whole, these alumni recognized and pursued the need for maintaining and updating the skills required to succeed in their careers.

The jobs and places of work reported by these alumni are reflective of the instructional programs in which they had earned degrees, versus specific sectors of the market place. And there was a considerable variety of sectors and industries represented.

Current Supervisors (N=43) Versus Non-Supervisors (N=78)

Communication On-The-Job. Fifteen different modes of communication were cited by both supervisors and non-supervisors. Those ranked as the top five for supervisors were: phone/TTY; speaking; signing; writing; and equal use of e-mail and facsimile. For non-supervisors the top five differed somewhat: phone/TTY; speaking; fax; e-mail; and interpreters.

The modes of communication **most often** used followed a slightly different order of frequency, but were in greater agreement. For supervisors, the order of most often used mode was: speaking; signing; e-mail; writing; and interpreters. For non-supervisors the order was: speaking; e-mail; writing; signing; and phone/TTY. Although use of interpreters among non-supervisors ranked sixth on their list in order of frequency, in terms of actual percentage use, both used interpreters equally often. Supervisors used phone/TTY's at a much lower frequency than did non-supervisors. In contrast, supervisors used sign language more often than non-supervisors. Based upon the data and comments written regarding the communication aspect of supervising, more frequent use of sign language by supervisors can be attributed to two primary factors. First, they reported working more often with other deaf employees than did non-supervisors. Second, several supervisors commented that they have greater decision-making power as to the communication modes to be used between them and the individuals they oversee.

It is important to emphasize that even though speaking was cited as the number one most often used mode of communication by supervisors and non-supervisors on-the-job, a variety of methods were used frequently by both groups.

Positive and Negative Aspects of Supervising. Supervisors and non-supervisors agreed that "Opportunity to Lead", and "The Challenge" were the top two positive aspects of being a supervisor. For supervisors, "Opportunity for Teamwork", "Exposure to Information", and "Opportunity to Educate" ranked third, fourth, and fifth as positives. Non-supervisors ranked "Exposure to Information", "Improved Self-Esteem", and "More Job Satisfaction" as third, fourth, and fifth in their view of positives. Although there were differences in the rank ordering, in actual percentages most of the other categories were prioritized similarly. Greatest disagreement occurred for the themes, "More Perks" and "Improved Self-Esteem", which non-supervisors perceived as positives of supervising more than did supervisors. Another theme, "Opportunity to Educate", was viewed as more positive by supervisors than by non-supervisors.

The non-supervisors group contained both individuals who supervised in a past job as well as those who had never supervised others (never-supervisors). Therefore, never-supervisors were analyzed separately to see if their perceptions differed substantially than those who had supervisory experience. In fact, the never-supervisors ranked

"Improved Self-Esteem", "More Job Satisfaction", and "More Perks" highest on their list of positive aspects of supervising. Clearly, these individuals valued personal enhancements as being the positives of having a supervisory position much more than those who were or had been supervisors.

As for the negative aspects of supervising, supervisors and non-supervisors were most divergent with regard to the issues of "Bias toward Deaf". Non-supervisors viewed this presenting a greater problem than did supervisors. And those who had never supervised saw it as a primary obstacle. In contrast, supervisors felt that having "Total Accountability" was more of a burden that came with a supervisory job.

Finally, responses regarding supervisory or management experiences included both comments unrelated to deafness and comments related to deafness. Comments in the first group focused on many areas, including personal as well as general considerations. Comments in the second group focused on communication or attitude.

Questions to Pursue

Further analyses have been done to identify alumni respondents who meet our criteria of "supervisor", defined as "an employee who directly supervises the work of others, including the performance of such functions as hiring, evaluation, and when necessary, termination", and "deaf and hard-of-hearing supervisors working in environments that are not staffed by or serving primarily deaf and hard-of-hearing people, that is, in what is sometimes described as the 'hearing' versus the 'deaf' sector of employment".

At present, forty alumni respondents who meet our criteria have been identified. Our plan is to contact them and set up interviews with as many of them as possible. This will enable us to pursue more in-depth exploration regarding their supervisory experiences. Some of the questions we want to pose are listed on Slides 13 and 14. They consist of background and demographic information, while others are specific to the work environment and strategies used to deal with communication and accommodation issues.

We are now seeking input from other professionals who work with deaf and hard-of-hearing individuals regarding important questions they think should be added to our current list.

References

Barnarrt, S. B. & Christiansen, J. B. (1985). The socioeconomic status of deaf workers: A minority group perspective. Social Science Journal, 32, 19-32.

Crammatte, A. B. (1968). Deaf persons in professional employment. Springfield, IL: Charles C. Thomas.

Compton, C. (Fall, 1993). Status of deaf employees in the federal government. The Volta Review, 95, 379-390.

Crammate, A. B. (1987). Meeting the challenge: Hearing-impaired professionals in the workplace. Washington, DC: Gallaudet University Press.

Davila, R. R. (1995). Partnerships 2000: Assessing the present and planning the future. In G. Anderson & D. Watson (Eds.), Partnerships 2000: Achieving a Barrier-Free Workplace, The First National Symposium Forum on Employment of Deaf and Hard of Hearing People (pp. 33-40). Little Rock: University of Arkansas Rehabilitation and Research and Training Center for Persons who are Deaf and Hard of Hearing.

Foster, S. B. (1987). Employment experiences of deaf college graduates: An interview study. Journal of Rehabilitation of the Deaf, 21, 1-15.

Foster, S. B. (October, 1988). Dealing with barriers in the workplace: Strategies used by deaf people in response to difficult situations at work. Paper presented at the 18th Southeast Regional Institute on Deafness, Memphis, TN.

Foster, S. (1992). Working with deaf people: Accessibility and Accommodation in the workplace. Springfield, IL: Charles C. Thomas.

Foster, S. B. (1992). Accommodation of deaf college graduates in the work place. In S. B. Foster & G. G. Walter (Eds.), Deaf Students in Postsecondary Education (pp. 210-235). London and New York: Routledge.

Foster, S .B. & Welsh, W. A. (1991). Assessment of graduate attainments in the work place: A multi-methodological approach. Journal of Applied Rehabilitation Counseling, 22 (1), 37-42.

Jamison, S. L. (1987). Perspectives on employment. In A. B. Crammatte, Meeting the challenge: hearing-impaired professionals in the workplace. (pp. 167-175). Washington, DC: Gallaudet University Press.

MacLeod-Gallinger, J. E. (1990). The career status of deaf women: A comparative look. American Annals of the Deaf, 137 (4), 315-325.

Mangrubang, F. R. (1993). Characteristics of leaders: Deaf administrators and managers in employment (Doctoral dissertation, University of Maryland, College Park, 1993). UMI Dissertation Abstracts, order number 9327462.

Mowry, R. L. & Anderson, G. B. (Fall, 1993). Deaf adults tell their stories: Perspective on barriers to job advancement and on-the-job accommodations. The Volta Review, 95, 367-377.

Schroedel, J. G. (1987). Predictors of socioeconomic status. In A. B. Crammatte, Meeting the challenge: hearing-impaired professionals in the workplace. (pp. 93-139). Washington, DC: Gallaudet University Press.

Schroedel, J. G., Mowry, R. L. & Anderson, G. B. (November, 1992). Experiences of deaf Americans with accommodations and advancement on the job: A qualitative study. Paper presented at the International Scientific Colloquium on Functional Limitations and Their Social Consequences: Report and Outlook: Montreal, Quebec.

Steffanic, D. J. (1992). A survey of deaf white-collar employees in the federal government (Report No. PRD 93-01). D. L. Smith, Gallaudet University, and P. A. Harris, U.S. Office of Personnel Management (Eds.). Washington, DC.

U. S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. (1990). Classified index of industries and occupations. Washington, DC: U. S. Government Printing Office.

Walter, G. G, Welsh, W. A. & Riley, D. (Summer/Fall, 1988). Relationship among degree, major, and earnings of deaf college graduates. Journal of Job Placement, 22-24.

Welsh, W. (1986). The status of deaf RIT graduates in the work place. Technical Report. Off of Postsecondary Career Studies and Institutional Research, The National Technical Institute for the Deaf, Rochester Institute of Technology.

Welsh, W. (1989). Career mobility: A review of selected literature. Technical Report. Office of Postsecondary Career Studies and Institutional Research, The National Technical Institute for the Deaf, Rochester Institute of Technology.

Welsh, W. & MacLeod-Gallinger, J. (1991). Effect of college on employment and earnings. In S. B. Foster & G. G. Walter (Eds.), Deaf Students in Postsecondary Education. London and New York: Routledge.

EMPLOYMENT EXPERIENCES SURVEY

Name: _____ Date: _____
(please print)

Your signature means that you have read the cover letter. It also means that we can use the information from this questionnaire. Please sign it.

Signature _____ Phone: (____) _____
☐ Voice ☐ TTY ☐ Both (check which one)

Fax: (____) _____

E-mail: _____

EMPLOYMENT

1. Are you employed now?

   ☐ No. (Please go to question #9)

   ☐ Yes. How long have you been in your present job? _____

Have you made any job changes since you last sent us information about yourself?

☐ No. (Please go to question #2)

☐ Yes.

Was your job change (check the one that is true for you):

☐ A **different job** at the **same company**? Name of new job: _____

☐ The **same** type of **job**, but in a **different company** or type of business?

Kind of business or company: _____

☐ A **different job** in a **different company**? Name of new job: _____

Type of company or business: _____

Was this job change a promotion for you? ☐ Yes ☐ No

If yes, whose idea was the promotion?

☐ Yours ☐ Your manager's ☐ Both yours and your manager's

If **not a promotion**, did you want it to be a promotion? ☐ Yes ☐ No, not really

2. Do you manage your own business? ☐ Yes ☐ No

If you manage your own business, what kind of business is it?

_____

_____

3. In your present job or business, do you (check which one is true for you):

☐ Supervise any other employees? If yes, how many? _____

☐ Hearing ☐ Deaf ☐ Both

Have you ever hired another employee? ☐ Yes ☐ No

Have you ever done employee evaluations? ☐ Yes ☐ No

☐ Supervise project activities, but not other employees?

☐ Work as a part of a team, but do not supervise a project by yourself or supervise other employees?

4. What is your job title now? _____

5. How do you communicate on your job? Please list all the methods you use (for example: signing, speaking, writing notes, phone - voice/TTY, E-mail, FAX, interpreters, etc.)

_____

_____

_____

6. How do you communicate **most often** on your job?

_____

_____

_____

7. Are there any other employees in your company who are deaf or hard or hearing?

☐ No ☐ Yes, there are _____ (how many?).

Do you work directly with any of them? ☐ Yes ☐ No

8. Are there employees in your company who use sign language?

☐ Yes. How many use sign language? _____

☐ No.

9. In any past job, did you supervise other employees?

☐ Yes. How many? _____

☐ Hearing ☐ Deaf ☐ Both

Have you ever hired another employee? ☐ Yes ☐ No

Have you ever done employee evaluations? ☐ Yes ☐ No

☐ No.

10. In your career, have you ever received a job promotion? ☐ Yes ☐ No

11. What do you think are **positive** things about being a supervisor or manager? (Even if you have never been a supervisor or manager.) Please explain:

_____

_____

_____

12. What do you think are **negative** things about being a supervisor or manager? (Even if you have never been a supervisor or manager.) Please explain:

_____

_____

_____

CONTINUING EDUCATION

13. Have you taken any courses or training since you graduated from RIT/NTID? Check which ones you have taken:

☐ Courses toward another degree

☐ Courses to update skills, but not for a degree

☐ On-the-job training/courses

☐ Courses just for personal interest or fun

☐ No additional courses or special training since graduation

14. Did you earn any other degrees(s)? ☐ Yes ☐ No

If yes, what degree(s)? _____

Where did you earn the degree(s)? _____
(school or facility)

What year did you earn the degree(s)? _____

CURRENTLY UNEMPLOYED

15. If you are not currently employed, why not? (Check which is true for you):

- ☐ I was laid off from my job.
- ☐ I was fired from my job.
- ☐ I quit my job.
- ☐ I am trying to set up my own business.
- ☐ I can't work right now because:
  - ☐ I am going to school. What are you studying? _____
  - ☐ I have an illness or disability. What kind? _____
  - ☐ I have family responsibilities and can't work outside of the home.
  - ☐ Other reasons? (Please explain) _____

_____

_____

We thank you for giving us this information. We hope the information will be helpful to other NTID/RIT graduates like yourself. We will send you a copy of the results when we finish our study. (Remember to sign your questionnaire before returning it.)

The Sample (N = 121)

Females = 35.5% (43) Males = 64.5% (78)

Currently Employed		92.6%	(112)
Not Currently Employed		7.4%	(9)
Circumstances:	Laid Off		(6)
	Fired		(2)
	Quit		(4)
	Setting Up a Business		(1)
			9*
Not Looking for a Job:	In school	(3)	
	Illness		(3)
	Family Responsibilities		(4)
			9**

* Two were looking for work and another was also in school and looking for work.

** More than one reason for not looking for a job could be checked. Therefore, those out of the labor force total more than seven.

1

Employed

Years in current job:

Mean 7.4 years
Median 6.0 years
Range 1.0 to 26.0 years

Job changes since last reported?

Yes 54.6%
No 45.4%

Have ever received a promotion	66.8%
Supervise others	38.4%
Work as part of a team	37.5%
Supervise projects	33.0%

2

Work Environment: All Employed Respondents

Work directly with other deaf employees?

No = 74.1%
Yes = 25.9%

	Mean	Median	Range
Number of deaf employees at place of work	15	1	0 to 600
Number of employees who use sign language	23	1	0 to 600

3

Continuing Education

Types

On-the-job training	53.7%	(65)
Courses toward a degree	43.0%	(52)
Update skills	38.0%	(46)
Personal interest	24.0%	(29)
No continuing education	8.3%	(10)

4

Continuing Education (continued)

Other Degrees Earned:

Associate's	5.7%	(2)
Bachelor's	28.6%	(10)
Master's	46.7%	(16)
Ph.D	8.6%	(3)

* Although 35 alumni reported having earned other degrees, 4 did not specify what they were.

5

Current Supervisors
(N = 43)

Females = 27.9% Males = 72.1%

Number of employees supervised:

Mean	Median	Range
14	6	1 to 80

Hearing status of those supervised:

Deaf Only	Hearing Only	Both Deaf and Hearing
2.2%	55.6%	42.2%

Do you have employees? Yes = 88%
Do you evaluate employees? No = 90.7%

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Communication Modes Used on the Job

	Supervisors	Non-Supervisors
Phone/TTY	86.0%	72.2%
Speaking	74.4%	70.2%
Signing	66.8%	50.4%
Writing	62.8%	49.6%
E-Mail	58.1%	52.1%
Fax	58.1%	52.9%
Interpreters	36.8%	51.2%
Relay	23.3%	19.8%

7

Communication Modes Used on the Job (continued)

	Supervisors	Non-Supervisors
Lipread	14.0%	8.3%
Gestures	14.0%	8.8%
Pager	14.0%	6.6%
Electronic Notes	9.3%	8.6%
Voice Mail	11.6%	6.6%
Video conference/Letters	9.3%	4.1%
Real-Time Display	7.0%	4.1%

8

Most Often Used Communication Modes on the Job

	Supervisors	Non-Supervisors
Speaking	65.1%	58.7%
Signing	37.2%	24.8%
E-Mail	16.3%	19.0%
Writing	16.3%	18.2%
Interpreters	11.6%	12.4%
Phone/TTY	7.0%	11.6%
Fax	7.0%	9.1%
Relay	2.3%	3.3%
Gestures	2.3%	0.8%
All of the Above	4.7%	3.3%

9

Work Environment: Supervisors vs. Non-Supervisors

	Supervisors	Non-Supervisors
Work directly with other other deaf employees	42.0%	14.0%
Number of deaf employees at place of work:		
Mean	12.6	14.1
Median	1.0	0.0
Range	0 to 200	0 to 600
Number of deaf employees who use sign language		
Mean	25.6	19.7
Median	1.0	0.0
Range	0 to 200	0 to 600

10

Positive Aspects of Supervising Supervisors vs. Non-Supervisors

	Supervisors	Non-Supervisors
Opportunity to Lead	36.4%	30.6%
The Challenge	26.0%	24.8%
Opportunity for Teamwork	16.9%	12.4%
Exposure to Information	15.6%	15.7%
Opportunity to Educate	13.0%	9.9%
Ability to Exercise Vision	11.7%	8.3%
Improved Self-Esteem	10.4%	13.2%
More Job Satisfaction	9.1%	10.7%
Serve as a Role Model	7.8%	9.1%
More Perks	5.2%	9.1%

11

Negative Aspects of Supervising Supervisors vs. Non-Supervisors

	Supervisors	Non-Supervisors
Communication Difficulties	27.3%	27.3%
Employee Problems	19.5%	15.7%
Administrative Burdens	11.7%	12.4%
Stress	10.4%	10.7%
Total Accountability	9.1%	7.4%
Long Hours/Meetings	9.1%	10.7%
Politics	7.8%	6.6%
Bias Toward Deaf	3.9%	8.3%
Isolation	1.3%	1.7%
Misc. Other Problems	7.8%	8.3%

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Some Interview Questions

Education and occupations of parents/guardians?

Did you have supporters/mentors for your educational and career paths? Who?

Was becoming a supervisor a goal for you? Always or later on?

How long had you been working before you became a supervisor?

What barriers did you encounter in your career? How did you overcome them?

What strategies do you use routinely to overcome communication difficulties?

13

Some Interview Questions (continued)

What accommodations has your company made for you to improve your ability to do your job?

What advice would you give other companies relative to deaf employees?

What would you do differently if you could do it over again?

14

Types of Industries or Businesses of Employment – Males

Landscape and Horticulture	2
Agricultural Services	1
Construction	1
Manufacturing - Misc. Non-Metal Materials and Stone	1
Manufacturing - Computers and Related Equipment	4
Manufacturing - Electrical Machinery, Equipment & Supplies	1
Radio & TV Broadcasting	1
Telephone Communications	3
Radio, TV, & Computer Stores	1
Eating & Drinking Places	1

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Types of Industries or Businesses of Employment – Males (continued)

Miscellaneous Retail Stores	1
Electric Light & Power	1
Sanitary Services	1
Wholesale Hardware, Plumbing, Heating Supplies	1
Retail Motor Vehicle Dealers	1
Furniture and Home Furnishings	1
Banking	2
Credit Agencies	1
Insurance	1
Real Estate, Real Estate Insurance Officers	1
Computer & Data Processing Services	2
Business Services, n.e.c.	4

16

Types of Industries or Businesses of Employment – Males (continued)

Engineering & Survey Services	1
Hotels & Motels	1
Laundry, Cleaning, & Garment Services	1
Theaters & Motion Picture Services	1
Miscellaneous Recreation & Entertainment Services	1
Offices & Clinics of Optometrists	1
Health Services, n.e.c.	3
Colleges & Universities	3
Accounting, Auditing, Bookkeeping	1
General Government, n.e.c.	2
Justice, Public Order & Safety	1

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Types of Industries or Businesses of Employment – Males (continued)

Public Finance, Taxation & Monetary Policy	2
Management & Public Relations	1
Administration of Human Resources	4
Administration of Environmental Quality and Housing	4
National Security & International Affairs	4
TOTAL	64

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Types of Industries or Businesses of Employment – Females

Printing, Publishing (except newspapers)	1
Guided Missiles, Space Vehicles	1
Manufacturing - Photographic Equipment & Supplies	1
U.S. Postal Service	1
Wholesale Lumber & Construction	2
Grocery Stores	1
Miscellaneous Retail Stores	1
Vending Machine Operators	1
Hospitals	3
Elementary and Secondary Schools	3
Colleges and Universities	4

19

Types of Industries or Businesses of Employment – Females (continued)

Education Services, n.e.c.	2
Social Services	2
Accounting, Auditing, Bookkeeping	2
Public Finance, Taxation, & Monetary Policy	3
Research, Development and Testing	1
Management and Public Relations Services	1
Administration of Human Resources	6
National Security and International Affairs	1
TOTAL	37

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Alumni Owning Businesses: Males

Job Title	Type of Business
Optometrist	Optometrist Office
Manager	Retail Furniture and Appliances
Manager	Interpreting Service
Manager	Carpentry (construction) Business
Director	Video/Film Productions
Services Manager	Wholesale Hardware Business
President	Captioning Service, Inc
Landscape Contractor	Landscape/Horticulture Business
Landscape Architect/Contractor	Landscape/Horticulture Business
Artist	Screen Printing

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Alumni Owning Businesses: Males (continued)

Job Title	Type of Business
Multi-Media Specialist	Multi-Media Service
Owner/Operator	Kennel Management/Breeder
Crew Chief	Carpet Cleaning Business
Boating Captain	Chartered Fishing Trips
Programmer/Analyst	Consulting Business
Computer Systems Analyst/Scientist	Computing Consulting Business

* One other gentleman reported that he had his own consulting business in addition to his government job. However, he did not provide any details about the nature of the consulting work.

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Alumni Owning Businesses: Females

Job Title	Type of Business
Public Relations Specialist	Printing/Publishing Company (not a newspaper)
Supervisor	Vending Machine Business
Supervisor	Miscellaneous Retail Business
Social Scientist Consultant	Educational Services
Management Analyst Consultant	Management and Public Relations Service

* One woman operated a rubber stamp business in addition to her full-time system's analyst job with the government.

23

Additional Degrees Earned: Instructional Programs

Program	Males	Females
Computer and Information Sciences	2	0
Computer Programming	1	0
Educational Administration	0	1
Educational Administration Special Education	2	1
Architectural Engineering	1	0
Judicial Science: Legal Specialist	1	0
General Studies	0	1

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Additional Degrees Earned: Instructional Programs
(continued)

Program	Males	Females
Theological Studies	1	0
Social Work	1	2
Optometry	1	0
Human Resource Mgmt.	0	1

Note: Although 36 alumni reported having earned another degree, not all reported the program from which they received their degree.

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